

Non-isolated Buck Offline LED Driver

Description

BP2863X is a high precision Buck constant current LED driver. The device operates in critical conduction mode and is suitable for 85Vac~265Vac universal input offline LED lighting.

The BP2863X integrates a 500V power MOSFET, with gate MOSFET driving technique. It doesn't need VCC capacitor and startup resistor. It can achieve excellent constant current performance with very few external components, so the system cost and size are greatly reduced.

BP2863X operates in critical conduction mode, it can achieve precise output current and excellent line regulation. The driver output current does not change with the inductance and output voltage.

The BP2863X offers protections to improve the system reliability, including LED short circuit protection, and thermal regulation function.

Features

- Integrated 800V Brige rectifier
- Integrated 600V Superfast Recovery Diode
- No VCC Capacitor and Startup Resistor
- Integrated HV JFET for IC Power Supply
- No flicker in parallel with several lamps
- ±5% LED Output Current Accuracy
- LED Short Protection
- Thermal Regulation Function
- Available in ASOP7 Package

Applications

- LED Bulb
- LED Tube
- Other LED Lighting



Typical Application

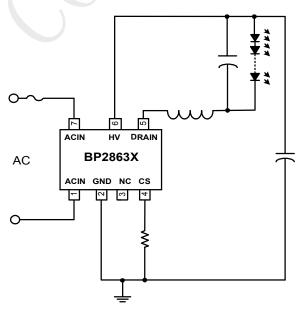
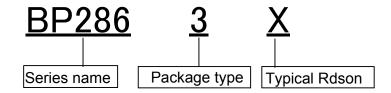


Figure 1. Typical application circuit for BP2863X



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Naming rules



Ordering Information

Part Number	Package	Packing Method	Marking
BP2863X	ASOP7	Tape 5000Pcs/Reel	BP2863
			XXXXXYX
			WXXXYYX

Pin Configuration and Marking Information

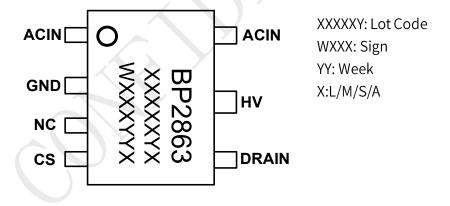


Figure 2. Pin configuration

Pin Definition

Pin No.	Name	Description
1,7	ACIN	AC source input
2	GND	Ground
3	NC	Not connect
4	CS	Current Sense Pin. Connect a sense resistor between this pin and GND pin.
5	DRAIN	Internal HV Power MOSFET Drain.
6	HV	High voltage power supply Pin



BP2863X

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